

dense, somewhat variegated tomentum. The metasternum bears very coarse punctures, which on the middle are rugose; the legs are reddish, and not very distinctly variegate.

A single individual, sent by Captain Broun, with the number 120 attached.

The species is allied to *A. Brouni* and *A. bullatus*, but is larger than either of those species; the uneven elytra and coarsely punctured sternum distinguish it from the former species; from *A. bullatus*, to which it is probably more closely allied, the much larger size and the light-coloured tomentum on the elytral elevations readily distinguish it.

LI.—*Preliminary Notice of new Species of Arachnida and Myriopoda from Rodriguez, collected by Messrs. George Gulliver and H. H. Slater.* By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

As some time will elapse before the detailed account of the collections made by the Naturalists accompanying the Transit-of-Venus expeditions will be published by the Royal Society, diagnoses of the new species of Arachnida and Myriopoda are submitted in this paper.

ARACHNIDA.

Genus SPHASUS.

Sphasus? extensipes, n. sp.

♀. Cephalothorax testaceous, irregularly pentagonal, almost flat; a longitudinal ridge from behind the eyes to beyond the caput: eyes black, placed upon a whitish elevation on the front of the caput; the anterior pair very minute, in the centre of the face, the others considerably larger and forming a transversely hexagonal figure: front margin of face projecting in the centre, behind the projection a V-shaped depression: abdomen testaceous, subcylindrical, flattened below, tapering slightly towards the posterior extremity: legs pale ochraceous; the tibiæ and metatarsi of the two anterior pairs fringed with brown bristles; front pair very like those of *Miagrammopes*; palpi short, pale ochraceous, with blackish tips; maxillæ and falces pale brown; pectoral plate elongate hexagonal; ventral surface of abdomen with three central longitudinal grey lines. Length 7 millims.; relative length of legs 1, 4, 2, 3.

(Coll. by Gulliver.)

Genus *SALTICUS*.*Salticus baptizatus*, n. sp.

♀. Cephalothorax inverted bell-shaped, dark shining piceous, with a whitish submarginal line, bordered within laterally by a rather wider tawny line; a minute cruciform amber-coloured spot in the centre of the caput, two lateral crescent-shaped fawn-coloured spots (one on each side) clothed with white scales, and a leaf-like fawn-coloured patch in the centre of the thoracic region, the front of which is depressed; the hinder part and apex of the thoracic patch clothed with whitish scales; falces, maxillæ, labrum, femora, tibiæ, and metatarsi of anterior legs castaneous; pectoral plate fusiform, testaceous; last three pairs of legs and tarsi of anterior pair amber-yellow, claws black; palpi whitish: eyes opaline, forming an oblong across the caput; relative sizes as follows— anterior central pair, posterior, lateral anterior, lateral intermediate: abdomen elliptical, dark brown, with a lateral whitish line and a broad, white-edged, irregular, central testaceous streak; ventral surface whitish, striated with brown at the sides; a central ferruginous streak; region of spinnerets testaceous. Length 9 millims.; relative length of legs 1, 4, 2, 3.

(Coll. by Gulliver.)

This species has the general coloration of the much smaller species figured in Lucas's 'Algeria' under the name of *S. testaceolineatus*.

Salticus rodericensis, n. sp.

♀. Cephalothorax dark piceous, clothed with testaceous hairs; a central longitudinal reddish castaneous streak from the back of the caput to the posterior margin; eyes opaline; falces, labrum, maxillæ, legs above, femora and tibiæ below, and epigyne castaneous, clothed with testaceous hairs; tarsi testaceous, with black claws; abdomen ovate, dark brown, pilose, with a dorsal testaceous streak interrupted by angulated lines at its inferior extremity, and intersected by a black line; two arched black lines spotted with testaceous from the sides of the testaceous streak to the spinnerets; pectoral plate, coxæ, trochanters, and venter fawn-coloured, base of venter white; a central tapering grey streak. Length 10 millims.; relative length of legs 1, 2, 4, 3.

(Coll. by Gulliver.)

Apparently allied to *S. intentus* of Cambridge.

Salticus scabellatus, n. sp.

♀. Oculiferous region of cephalothorax black, bounded by a crescent-shaped reddish castaneous belt; thoracic region dark piceous; eyes opaline; palpi testaceous; falces, labrum, maxillæ, and anterior tibiæ dark piceous; legs above fawn-coloured, pectoral plate and legs below paler; abdomen grey, subpyriform, its base black; a central pale brown longitudinal stripe, bounded laterally by four black spots, which form a square; venter pale brown, speckled with dark brown, a central line and the margins dark grey. Length 8 millims.; relative length of legs 4, 1, 3, 2.

(Coll. by Gulliver.)

Seems to be allied to *S. exilis* of Cambridge.

Genus PHOLCUS.

Pholcus vexillifer, n. sp.

♀. Cephalothorax inverted heart-shaped, waved at the ends, bright reddish castaneous; caput ascending, with the front margin and a central marking yellowish; eyes upon elevations of the surface, those of the lateral groups forming triangles, anterior pair of eyes small; falces blackish, yellowish at base; maxillæ and labrum tawny; pectoral shield pyriform, yellowish; legs pale amber-yellow, clothed with whitish hairs and black spines; palpi testaceous, with piceous tips: abdomen subcylindrical with a wavy outline, above testaceous, with a central stellate streak, several oblique lines, and the borders brown, posterior extremity testaceous; underside the same colour, with the base and a central streak greyish brown. Length 10 millims.; relative length of legs 1, 2, 4, 3.

(Coll. by Gulliver.)

Genus META.

Meta vacillans, n. sp.

♂ ♀. Cephalothorax smoky testaceous, obovate, truncated at the ends, depressed behind; caput ascending, convex, with a marked depression on each side; a central longitudinal ridge; eyes black, in two slightly arched series: abdomen cylindrical, testaceous, with two central lines and a broad undulated longitudinal dusky band, bounded by three black spots on each side; the sides silvery; underside black, with a silvery line on each side: legs long, slender, testaceous, paler below, blackish at the joints, sparsely dotted with long spines; palpi slender,

testaceous ; male palpus with a clavus resembling the head of a vulture, covered with long bristles ; falces subcylindrical, testaceous, about nine teeth on their inner margins ; pectoral plate pentagonal scutiform, testaceous. Length of body 6 millims. ; relative length of legs 1, 2, 4, 3.

(Coll. by Gulliver.)

Genus TETRAGNATHA.

Tetragnatha Nero, n. sp.

♂ ♀. Cephalothorax fusiform, truncate at each end, narrowed in front, with a slender marginal ridge ; caput ascending, bounded behind by one or two depressed diverging lines, and with a central depressed spot ; centre of thoracic region depressed ; eyes black ; palpi long and slender, of the male with a globose clavus with white cap, and held by finger-like processes ; falces with ten central teeth on each inner margin, and two terminal teeth, the longer one of which projects forwards on each side of the movable fang, the latter black ; but the remainder of the cephalothorax and its members tawny ; the palpi, coxæ, and trochanters pale ; pectoral plate deep castaneous ; abdomen pale brown, irrorated with æneous, subcylindrical, a darker dorsal line. Length of body, ♂ 8 millims., ♀ 12 ; relative length of legs 1, 4, 2, 3.

(Coll. by Gulliver.)

Genus NEPHILA.

Nephila instigans, n. sp.

♀. Cephalothorax oblong, wider behind than before, laterally convex, contracted behind the caput, dull mahogany-red, but the back of thoracic region shining black, with a deep central depression ; caput ascending, covered with black bristles, which also form a central longitudinal line ; legs bright ochre-yellow, sprinkled with black spines ; the tarsi and metatarsi castaneous, clothed with brown hair ; proximal extremities of the femora blackish ; basal half of palpi yellow, nearly smooth, apical half castaneous, clothed with black bristles ; falces dark reddish castaneous, with three teeth on each inner margin ; pectoral shield heptagonal subpyriform, black, with central orange longitudinal streak ; abdomen sandy brown, with a quadrangle of four punctures ; region of epigyne blackish. Length 19 millims. ; relative length of legs 1, 2, 4, 3.

(Coll. by Gulliver.)

This species does not possess the usual tufted legs.

Nephila ardentipes, n. sp.

♀. Cephalothorax black, hairy, oblong, with convex margins, contracted behind the caput; two central shining black tubercles; a deep excavation at the back of the thoracic region; caput ascending, laterally excavated; oculiferous tubercles shining; palpi cylindrical, mahogany-red, hairy at the base, the last three joints black and hairy: abdomen greyish testaceous, silvery pubescent; the dorsal region subochraceous, enclosing a quadrangle of four black spots in front and two parallel rows of black spots behind, where it is also bounded by six black spots, three on each side; sides covered with parallel, irregular, interrupted black lines; underside brownish, dark towards the base and crossed by a yellow band, beyond which is an area enclosed by black dots and shaped like a heraldic shield: legs robust, hairy, mahogany-red; the apices of the femora, knees, apices of tibiæ, the tarsi, and metatarsi black, the black parts densely hairy; maxillæ black, with reddish margins; pectoral plate heptagonal, with eight tubercles, three of which are prominent and form a triangle; falces black, with three marginal teeth. Length 36 millims.; relative length of legs 1, 2, 4, 3.

(Coll. by Gulliver.)

Most nearly allied to *N. nigra* of Vinson; but with the abdomen smaller and not clouded with black, and the legs altogether redder. I have examined thirty-seven examples, but have seen no variation.

Genus *MIAGRAMMOPES*.*Miagrammopes Gulliveri*, n. sp.

Allied to *M. Thwaitesii* of Cambridge, but differing as follows:—cephalothorax longer and broader, more angular when seen laterally, and with convex rather than concave margins; caput longer, rather higher than the thoracic region, more convex in front, testaceous, with silvery reflections and a whitish hind border; eyes black, forming a convex series across the back of the caput; lateral eyes twice as large as the central pair, the latter far apart; legs amber-yellow, the femora notched at the distal extremity, the intermediate joints shorter than in *M. Thwaitesii*, the tarsi of the hind legs broader, claws black; palpi short, slender, hairy, testaceous; falces small, movable fang piceous; sternum somewhat different in form; abdomen nearly twice as long as the cephalothorax, testaceous, with a central blackish line wider than in *M. Thwaitesii*, and not throwing off downward branches; basal

region less contracted, lateral margins subangulated in the middle, whence they converge towards the hinder extremity; ventral surface slightly concave, testaceous, with two longitudinal brown lines; spinners concealed by dense hairs, which converge towards the central line. Length 6 millims.; relative length of legs 1, 4, 2, 3.

(Coll. by Gulliver.)

ACARIDÆ.

Genus HOLOTHYRUS.

Holothyrus? testudineus, n. sp.

Carapace ovate, convex, conical in front, fawn-coloured, clouded with brown, smooth and shining, with well-defined lateral carina; legs rather short and robust; ventral surface flattened and shining behind, with an apparently hinged oblong projecting anterior plate, wider in front than behind; body in front concave, with *only three pairs of legs*, their relative size 3, 2, 1; antennæ with hairy terminal joint. Length $\frac{3}{4}$ millim.

(Coll. by Gulliver.)

Although fourteen examples of this species have come, not differing in size or structure, I have been unwilling to erect a new genus for its reception. From many points which it appears to have in common with *H. coccinella* of Mauritius, I think it possible that it may turn out to be an immature condition of that species.

MYRIOPODA.

Genus STRONGYLOSOMA.

Strongylosoma erucaria, n. sp.

Deep chocolate-brown; under surface, legs, lateral wings, and hind margins of the segments pale testaceous; segments glabrous, first dorsal segment with well-defined lateral carina; preanal segment terminally rostriform. Length 8 lines, width 1 line.

(Coll. by Gulliver.)

Genus CAMBALA

Cambala nodulosa, n. sp.

Reddish testaceous; dorsal segments with a lateral grey stripe; first segment longitudinally multisulcate; remaining segments crossed by two rows of tubercles, between which, on each segment, is a depressed line; posterior margins narrowly reborded. Length 8 lines, width 1 millim.

(Coll. by Gulliver.)

Genus SPIROSTREPTUS.

Spirostreptus avernus, n. sp.

Black, legs and antennæ castaneous; forty-three dorsal segments; first segment smooth, with narrow marginal ridge; remaining segments rugulose and depressed in front, smooth behind, striated at the sides; preanal segment produced into a point behind. Length 13 lines, width 1 line.

Cascade Valley. (Coll. by Gulliver.)

Spirostreptus sorornus, n. sp.

Colour and general structure of the preceding; forty-nine dorsal segments, which are not rugulose in front. Length 1 inch 9 lines, width 3 millims.

(Coll. by Slater.)

Possibly *S. nigerrimus* of Newport, only a fragment of which now stands in the collection; so that the number of segments cannot be satisfactorily ascertained.

Spirostreptus Gulliveri, n. sp.

Olivaceous; dorsal region dark; eyes black; face, margins of first dorsal segment, and hind margins of other segments tawny; legs reddish tawny; fifty-seven dorsal segments, first segment with square anterior angles, above which are four depressed lines; marginal ridge feebly developed; each of the remaining segments crossed by a depressed line, behind which they are swollen; sides striated as usual; preanal segment slightly produced, with bisinuate hind margin. Length 2 inches 4 lines, width 5 millims.

(Coll. by Gulliver.)

Spirostreptus simulans, n. sp.

Olivaceous; a dorsal series of dark spots in front and a continuous lateral series of blackish spots; first segment clouded with brown behind; forty-three dorsal segments, first segment with marginal ridge feebly developed; remaining segments rugulose and depressed in front; preanal segment regularly arched. Length $10\frac{1}{2}$ lines, width 2 millims.

(Coll. by Gulliver.)

Genus SPIROBOLUS.

Spirobolus Hecate, n. sp.

Shining black; front margins of the segments below casta-

neous ; fifty-nine dorsal segments ; lateral wings of first segment quadrisulcate in front ; remaining segments swollen behind, laterally striated ; preanal segment deeply bisinuated behind. Length 4 inches 3 lines, width 7 millims.

(Coll. by Gulliver.)

EURLITHOBIUS, n. gen.

Lithobio affinis, multo latior, segmentis viginti ; antennarum articulis septendecim, quorum decem primoribus et postremo distinctis, aliis inconspicuis ; oculis utrobique quatuor ; pedum paribus uno et viginti, latis, breviusculis.

Gen. typ. *E. Slateri*.

Eurylithobius Slateri, n. sp.

Fawn-coloured, legs and ventral surface testaceous ; dorsal segments gradually narrowing towards each extremity, with two longitudinal depressed lines and a lateral marginal ridge ; terminal segment subconical behind. Length of body 1 inch, including hind legs 1 inch 8 lines ; width in the centre $4\frac{1}{2}$ lines.

(Coll. by Slater.)

Genus RHOMBOCEPHALUS.

Rhombocephalus smaragdinus, n. sp.

Anterior half of body emerald-green, posterior half olive-green ; segmental incisions deeper-coloured ; legs pale greenish, in twenty pairs ; posterior pair without denticles ; preanal plate oblong. Length of the body $10\frac{1}{2}$ lines.

(Coll. by Slater.)

Genus MECISTOCEPHALUS.

Mecistocephalus Gulliveri, n. sp.

Amber-coloured, legs paler ; head reddish castaneous ; forceps of mandibles black, the latter with about four teeth ; head below deeply excavated ; dorsal segments with a deep longitudinal sulcus ; forty-eight pairs of legs. Length 1 inch 1 line.

(Coll. by Gulliver.)

Seems allied to *Geophilus insularis* of Lucas.